RG-RAP2200 SERIES
AC1300 DUAL BAND CEILING MOUNT ACCESS POINTS

Product Overview

Ruijie Reyee Series RG-RAP2200 Series dual-band ceiling mount AP is a high-performance ceiling mount AP for indoor large-area Wi-Fi coverage scenarios. The device supports 802.3af/at PoE and 12V DC local power supply. The dual LAN ports design facilitates the expansion of third-party devices to meet the needs of more networking scenarios. Compliant with 802.11a/b/g/n/ac Wave1/Wave2 Wi-Fi protocol, RG-RAP2200 supports MU-MIMO dual-stream technology and offers built-in omnidirectional antennas. It can operate concurrently at 2.4GHz and 5GHz, providing high-speed wireless access of 400Mbps at 2.4GHz, 867Mbps at 5GHz and up to 1267Mbps per AP. Its coverage of over 20 meters makes it an ideal choice for many wireless scenarios, especially in offices, commercial industry, hotels, service scenarios, etc.

The industrial product design, iconic edges and breathing light makes the product more recognizable. Adopting the non-directional installation design, the new mounting kits support various installation methods including on desktop, ceiling, wall, and pole, which improves the versatility of installation, simplifies the installation steps, reduces the installation difficulty, and greatly improves the installation experience of the device.

RG-RAP2200 Series supports Ruijie's self-developed smart networking feature. With the Ruijie Cloud app, users can quickly complete the device deployment and configuration, remote management, operation and maintenance of the entire network, which greatly reduces the investment of equipment cost, labor cost and time cost in the process of wireless network construction.

Users can perform comprehensive local management or remote management of the equipment in the entire network via the Ruijie Cloud app, equipment EWEB management, Ruijie Cloud platform, etc. Users can also share the network to third party for network hosting and collaborative management, thereby achieving simpler, easier to use, more secure and convenient enterprise network operation and maintenance.

* Note: For device models and versions that support the smart networking feature, please consult Ruijie customer service or the distributors.

Highlights

- **802.11ac Wave2 technology**
- **Auto-provisioning via Self-Organizing Network:** Supports Ruijie's self-developed smart networking feature, which breaks through the product limitations and realizes auto-discovery, auto-networking and auto-configuration between gateways, switches, and wireless APs without the need for controllers or Internet access
- **Lifetime free Ruijie Cloud management:** Remote fault alarm, one-click optimizing and maintenance on Ruijie Cloud App
- **More LAN Ports:** Two LAN interfaces are provided to support more services
- **Seamless layer 3 roaming**
- **Industrial Design:** Robust casing, Provide better strength and safety for products

Product Features

High-speed dual-band Wi-Fi

The device supports 2.4GHz and 5GHz dual-band communication, providing access rate of 400Mbps at 2.4GHz, 867Mbps at 5GHz and up to 1267Mbps per AP. It can provide 5GHz frequency band with less interference, wider channel, and faster speed for the terminals, allowing the users to enjoy excellent wireless experience.

Dual LAN ports design

The device adopts the dual LAN ports design. Even for complex networking requirements, it can easily and quickly support the expansion of third-party devices, such as cameras, time and attendance devices, etc.

Support routing and AP mode

The device supports both AP and routing mode. A wireless network can be formed with multiple APs, or it can be used as a wireless router when deployed independently. The device offers more flexible configurations, more abundant application features, and more extensive applicable scenarios.

Support Layer 3 networking

The device supports Layer 3 roaming for the complex Layer 3 network. When users move across the Layer 3 networks, seamless roaming can be achieved without service interruption.

Stronger and more stable signals

An aluminum alloy antenna reflector is added to reflect interference signals and focus effective signals so as to provide stronger signal transmission and better receiving sensitivity.
The device uses FBAR to filter out all kinds of interferences caused by the operator's base stations, microwave ovens, Bluetooth devices, etc., so as to provide cleaner wireless signals, higher transmission rate and more stable transmission quality.

Robust casing

With the robust and flame-retardant material of the AP casing, the impact resistance is 5 times higher than that of common ABS plastic materials. The tensile and flexural strengths are increased by 30%, which is not easy to damage. Users can rest assured during usage and maintenance.

Simple installation

It supports various installation methods including on desktop, ceiling, wall, and pole. Adopting the non-directional installation design, the equipment can be installed in one go efficiently.
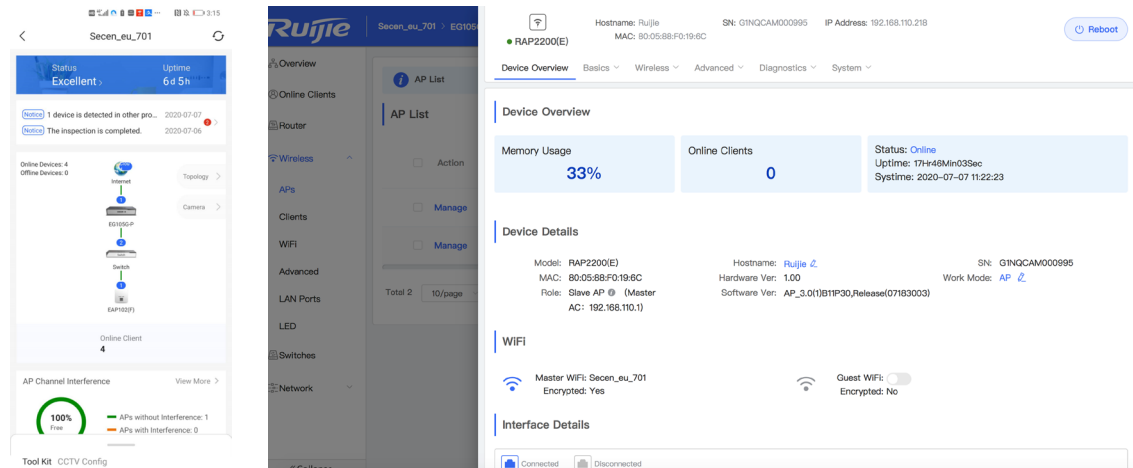
Industrial design

The industrial product design, iconic edges and breathing light makes the product more recognizable.

Management Features

Multi-end management

The AP supports management via Ruijie Cloud app, Ruijie Cloud platform, equipment EWEB management to achieve multi-end local and remote management on PC, Ruijie Cloud app.

Fast and smart configuration

In large-scale complex networks, the configuration of the entire network can be completed by connecting to a single gateway device. There is no need to configure the devices separately, which can greatly reduce the device configuration time.

Scenario-based configuration

Scenario-based configurations can be performed via the web and Ruijie Cloud app, which can greatly reduce the configuration threshold of complex functions, such as visitor isolation solution, flow control solution, etc. Even novices can easily fulfill the diverse and complex requirements of the customers.

Visualized operation and maintenance

The cloud computing network topology can comprehensively present the equipment operating status of the entire network. Through the rich information in the topology, you can quickly get the full picture of the network (network egress status, link status, device status), and quantify the user experience and network quality, so that users can master the information of the entire network.

Remote collaborative management

Users can perform comprehensive remote operation, management, and maintenance of the equipment in the entire network via the Ruijie Cloud app, Ruijie Cloud platform, etc. They can also share the network to third party for network hosting and collaborative management to operate and maintain the enterprise network more efficiently.

AI & big data network optimization

Through artificial intelligence and cloud big data, the AP can perform comprehensive smart network operation, maintenance and optimization, including but not limited to:

1.   Automatic identification of new equipment and adding it into the network, automatic system repair such as avoiding conflict of the WAN IP addresses

2.   Smart system optimization such as service-based network policy configuration, RF channel and roaming adjustment

3.   Diagnosis and repair suggestions for more than 30 common network anomalies including DHCP conflicts, abnormal negotiation rates, excessive traffic, AP disconnection and device interference.
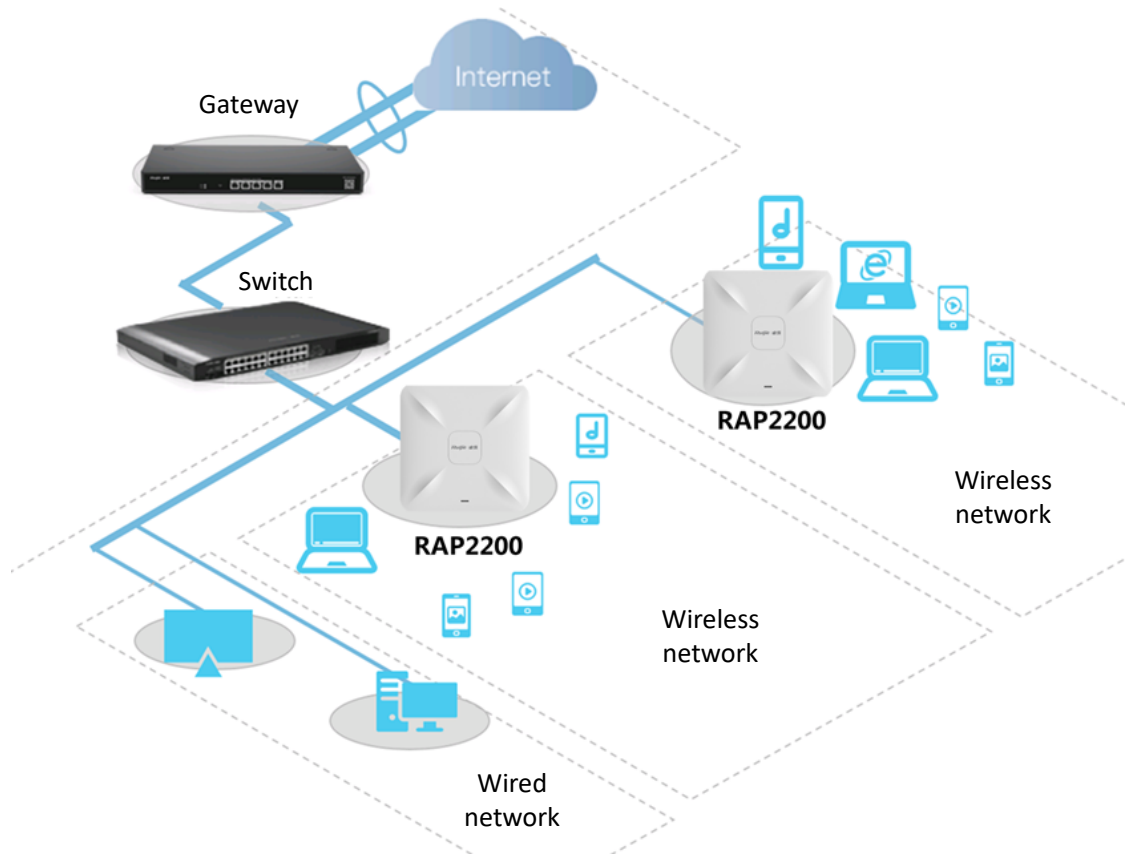
Technical Specifications

Model	RG-RAP2200(E)	RG-RAP2200(F)
Hardware specifications		
Radio	Dual-stream dual-band	
Protocol	Concurrent 802.11ac wave2, wave1, 802.11a/b/g/n	
Operating Bands	802.11b/g/n: 2.4G ~ 2.4835GHz 802.11a/n/ac: 5G: 5.150~5.350GHz, 5.725~5.850GHz	
Antenna	Array antennas (2.4G: 2dBi, 5G: 2dBi)	
Spatial Streams	2.4G 2x2MIMO 5G 2x2MIMO	
Max Throughput	Up to 400Mbps at 2.4G Up to 867Mbps at 5G 1.267Gbp per AP	
Modulation	OFDM: BPSK@6/9Mbps, QPSK@12/18Mbps, 16-QAM@24Mbps, 64-QAM@48/54Mbps DSSS: DBPSK@1Mbps, DQPSK@2Mbps, and CCK@5.5/11Mbps MIMO-OFDM: BPSK, QPSK, 16QAM, 64QAM and 256QAM	
Receiver Sensitivity	11b: -91dBm (1Mbps), -88dBm (5Mbps), -85dBm (11Mbps) 11a/g: -89dBm (6Mbps), -80dBm (24Mbps), -76dBm (36Mbps), -71dBm (54Mbps) 11n: -83dBm@MCS0, -65dBm@MCS7, -83dBm@MCS8, -65dBm@MCS15 11ac HT20: -83dBm (MCS0), -57dBm (MCS9) 11ac HT40: -79dBm (MCS0), -57dBm (MCS9) 11ac HT80: -76dBm (MCS0), -51dBm (MCS9)	
Maximum Transmit Power	5.725~5.850GHz: ≤20dBm (EIRP) 5.150~5.350GHz: ≤20dBm (EIRP) 2.4~2.4835GHz: ≤20dBm (EIRP)	
Adjustable Power	1dBm	
Dimensions	194mm×194mm×35mm (excluding mounting kits)	
Weight	0.45kg (excluding mounting kits)	
Service Ports	2 10/100/1000Base-T Ethernet ports, PoE/LAN1 port supports PoE	2 10/100Base-T Ethernet ports, PoE/LAN1 port supports PoE
Management Port	NA	
LED Indicator	Single indicator (green light)	
Power Supply	Local power supply, DC 12V/1.5A (Note: The power adapter is sold as an optional accessory) 802.3af/802.3at PoE	
Power Consumption	≤ 12.95W	

Model	RG-RAP2200(E)	RG-RAP2200(F)
Environment	Operating temperature: 0°C~40°C Storage temperature: -40°C~70°C Operating humidity: 5%~95% (non-condensing) Storage humidity: 5%~95% (non-condensing)	
Installation	Wall-mount, ceiling-mount	
Safety Standard	GB4943, IEC 60950-1	
EMC Standard	GB9254, EN301 489, EN50155, EN50121, EN55032, EN61000, EN55035	
Vibration Standard	IEC61373	
Radio Standard	SRRC certification, EN300 328, EN301 893	
MTBF	>400000H	
Software Features		
Operating Mode	AP mode and routing mode	
WLAN	Maximum number of clients: 110	
	Recommended number of clients: 40 (8 at 2.4GHz, 32 at 5GHz)	
	Up to 8 SSIDs	
	Support SSID hiding Configuring the authentication mode, encryption mechanism, and VLAN attributes for each SSID	
	SSID-based and radio-based STA limit	
	Support Layer 2 user isolation	
Roaming	Support Layer 2 and Layer 3 roaming	
Security	Support PSK authentication Support static blacklist and whitelist Support WPA (TKIP), WPA2 (AES), and WPA-PSK data encryption	
Routing	Support static IP address, DHCP, PPPoE Dial Up	
Management and maintenance	Support unified networking of all network equipment Support local or remote management with Ruijie Cloud app Support local management with web Support remote management with Ruijie Cloud platform	
Platform management features	Automatic RF adjustment via the platform Unified configuration via the platform Unified monitoring via the platform	

Typical Applications

RG-RAP2200 Series is an ideal choice for scenarios with simple building structure, no special obstructions, and relatively concentrated users, such as conference rooms, libraries, classrooms, bars, leisure centers, etc. The AP can be flexibly implemented according to different environments, and provides user access for up to 110 terminals per AP.

Ordering Information

Model	Description
RG-RAP2200(E)	AC1300 dual-band Gigabit ceiling mount AP, dual Gigabit LAN uplink ports, built-in antennas, dual-band 2.4GHz/5GHz, 802.11a/b/g/n/ac Wave1/Wave2, up to 1267Mbps access rate per AP; support AP and routing mode, Layer 3 roaming, Reyee unified networking and Ruijie Cloud app management; Support PoE and local power supply (PoE module and DC adapter are sold separately)

Model	Description
RG-RAP2200(F)	AC1300 dual-band FE ceiling mount AP, dual FE LAN uplink ports, built-in antennas, dual-band 2.4GHz/5GHz, 802.11a/b/g/n/ac Wave1/Wave2, up to 1267Mbps access rate per AP; support AP and routing mode, Layer 3 roaming, Reyee unified networking and Ruijie Cloud app management; Support PoE and local power supply (PoE module and DC adapter are sold separately)

Ruijie Networks Co., Ltd.